**OST EXP NO:-5**

**CODE :**

x=[3,-1,0,1,3,2,0,1,2,1];

disp(x,"X = ")

y=[1,1,1];

N=4;

M=length(y);

L=N-M+1;

b=length(x)

mat=matrix(x,L,b/2)'

mat=[mat, zeros(b/2,L)] *//padding zeros*

disp(mat,"mat")

y=[y,zeros(1)] *//padding zeros*

disp("H = ")

disp(y);

H=fft(y);

k=0

padded=0

for i=1:size(mat,1)

X=fft(mat(i,:));

padded=padded+[zeros(1,k) , ifft(X.\*H),zeros(1,2\*N-k)]

k=k+2

end

disp(padded,"Overlap Add Output = ")

**OUTPUT:**

